CLAIMS:

1. A modified interferon regulatory factor (IRF) protein, the protein comprising at least one modified serine or threonine phosphoacceptor site in the carboxy-terminus domain, with the proviso that where said IRF protein is IRF-3, said at least one modified phosphoacceptor site does not comprise Ser-385 or Ser-386.

2. The interferon regulatory factor (IRF) protein according to claim 1, wherein cytokine gene activation by the modified IRF is increased relative to cytokine gene activation by a corresponding wild type IRF protein.

3. The interferon regulatory factor (IRF) protein according to claim 1 or 2, wherein the modified IRF is an IRF-3 protein modified at at least one serine or threonine phosphoacceptor site.

4. The interferon regulatory factor (IRF) protein according to claim 1 or 2, wherein the modified IRF is an IRF-7 protein modified at at least one serine or threonine phosphoacceptor site.

5. The interferon regulatory factor (IRF) protein according to any one of claims 1 ~~to 4~~ or 2, wherein the at least one modified phosphoacceptor site is modified by phosphorylation.

6. The interferon regulatory factor (IRF) protein according to any one of claims 1 ~~to 4,~~ or 2 wherein the at least one modified phosphoacceptor site comprises an amino acid residue having an acidic side chain.

7. The interferon regulatory factor (IRF) protein according to claim 6, wherein the amino acid residue is aspartic acid.

8. The interferon regulatory factor (IRF) protein according to claim 5, wherein the modified IRF is IRF-3 modified at a site selected from at least one of Ser-396, Ser-398, Ser-402, Thr-404 and Ser-405.

9. The interferon regulatory factor (IRF) protein according to claim 8, wherein the modified IRF is IRF-3 modified at Ser-396, Ser-398, Ser-402, Thr-404 and Ser-405 sites.

10. The interferon regulatory factor (IRF) protein according to claim 9, wherein the modified IRF comprises a carboxy-terminus domain of Ser-396, Ser-398, Ser-402, Thr-404 and Ser-405 and an amino-terminus domain from IRF-7.

11. The interferon regulatory factor (IRF) protein according to claim 6 or 7, wherein the modified IRF is IRF-3

modified at a site selected from at least one of Ser-396, Ser-398, Ser-402, Thr-404 and Ser-405.

12. The interferon regulatory factor (IRF) protein according to claim 11, wherein the modified IRF is IRF-3 modified at Ser-396, Ser-398, Ser-402, Thr-404 and Ser-405 sites.

13. The interferon regulatory factor (IRF) protein according to claim 12 having SEQ ID NO. 2 (IRF-3 (5D)).

14. The interferon regulatory factor (IRF) protein according to claim 12, wherein the modified IRF comprises a carboxy-terminus domain of Ser-396, Ser-398, Ser-402, Thr-404 and Ser-405 and an amino-terminus domain from IRF-7.

15. The interferon regulatory factor (IRF) protein according to claim 14, wherein the modified IRF has an amino-terminal domain comprising residues 1 to 246 of IRF-7 and a carboxy-terminal domain comprising residues 132 to 427 of IRF-3 modified by replacement each of Ser-396, Ser-398, Ser-402, Thr-404 and Ser-405 by an aspartic acid residue.

16. The interferon regulatory factor (IRF) protein according to claim 15 having SEQ ID NO. 11 (IRF-7(1-246)/ IRF-3(5D)(132-427)).

17. The interferon regulatory factor (IRF) protein according to claim 5, wherein the modified IRF is IRF-7 modified at a site selected from at least one of Ser-477 and Ser-479.

18. The interferon regulatory factor (IRF) protein according to claim 17, wherein the modified IRF-7 is modified at Ser-477 and Ser-479 sites.

19. The interferon regulatory factor (IRF) protein according to claims 6 or 7, wherein the modified IRF is IRF-7 modified at a site selected from at least one of Ser-477 and Ser-479.

20. The interferon regulatory factor (IRF) protein according to claim 19, wherein the modified IRF-7 is modified at Ser-477 and Ser-479 sites.

21. The interferon regulatory factor (IRF) protein according to claim 20 having SEQ ID NO. 9 (IRF-7(2D)).

22. A nucleotide sequence selected from:

(a) a first nucleotide sequence which encodes the interferon regulatory factor (IRF) protein according to any one of claims 6, 7, 11 to 16, 19, 20 or 21, or

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(b) a second nucleotide sequence that is hybridizable under stringent conditions with the complement of the first nucleotide sequence, wherein said second nucleotide sequence encodes an IRF protein wherein at least one serine or threonine phosphoacceptor site comprises an amino acid residue having an acidic side chain.

23. The nucleotide sequence ~~according to claim 22, having~~ comprising SEQ ID NO. 1.

24. The nucleotide sequence ~~according to claim 22, having~~ comprising SEQ ID NO. 8.

25. The nucleotide sequence ~~according to claim 22, having~~ comprising SEQ ID NO. 10.

26. A pharmaceutical composition comprising an effective amount of the interferon regulatory factor (IRF) protein according to any one of claims 1 ~~to 21~~ or 2, together with a pharmaceutically acceptable carrier, for the treatment of a viral infection.

27. The pharmaceutical composition according to claim 26, wherein the viral infection is selected from an influenza infection, a herpes infection, a hepatitis infection and an HIV infection.

28. Use of the interferon regulatory factor (IRF) protein according to any one of claims 1 to 21 to activate a cytokine gene.

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29. The use according to claim 28, wherein the cytokine gene is an interferon gene or a chemokine gene.

30. Use of the interferon regulatory factor (IRF) protein according to any one of claims 1 to 21 in cancer treatment.

31. Use of the nucleotide sequence according to any one of claims 22 to 25 to modify a target cell of an organism.

32. A commercial package containing as an active pharmaceutical ingredient the pharmaceutical composition according to claim 26 together with instructions for its use for the treatment of a viral infection.

33. The commercial package according to claim 32, wherein the viral infection is selected from an influenza infection, a herpes infection, a hepatitis infection and an HIV infection.

34. A commercial package containing as an active pharmaceutical ingredient the interferon regulatory factor (IRF) protein according to any one of claims 1 ~~to 21~~ or 2 together with instructions for its use for the treatment of cancer.